Comment Letter O015

O015

NRDC
THE EARTH'S BEST DEFENSE

NATURAL RESOURCES DEFENSE COUNCIL

Via U.S. Mail and Facsimile

July 28, 2004

RECEIVED
JUL 30 2004

Chairman Joseph E. Petrillo and
Members of the High-Speed Rail Authority
Attn: California High-Speed Train
Draft Program EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814
Fax: (916) 322-0827

Re: Draft Program EIR/EIS Comments on the California High-Speed Train

Dear Chairman Petrillo and Members of the High-Speed Rail Authority:

The following comments regarding the proposed California High-Speed Train System ("HST" or "project") are submitted on behalf of the Natural Resource Defense Council ("NRDC") and its more than 550,000 members, 110,000 of whom reside in California. NRDC is a national, nonprofit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment, with California offices in Los Angeles and San Francisco.

The concept of a high-speed rail system in California is, in our view, an exciting one, with broad public importance and enormous implications across a wide range of environmental and other concerns. Precisely for this reason, however, and because of the extraordinary scale and range of impacts associated with the proposed project, the level of environmental analysis required is justifiably high, and the need to provide the public and decision-makers with objective and accurate information is understandably great.

Unfortunately, the California High-Speed Rail Authority (the "Authority") and the Federal Railroad Administration (the "FRA") have failed in the draft environmental impact report and environmental impact statement ("DEIR/S" or "draft") to meet this standard. In our view, the Authority and the FRA have prepared and circulated an inadequate draft that fails to reflect the level of detail a project of this magnitude demands. The draft's discussion of potential impacts and mitigation strategies consistently defers to a future point in time meaningful analysis of significant impacts as well as detailed discussion of specific and enforceable mitigation measures. As a result, the DEIR/S does not comply with the California Environmental Quality

www.nrdc.org 1314 Second Street
Santa Monica, CA 90401
TEL 310 434-2300 FAX 310 434-2399

NEW YORK • WASHINGTON, DC • SAN FRANCISCO

Act ("CEQA"), Cal. Pub. Res. Code § 21000 *et seq.*; the CEQA Guidelines, California Code of Regulation, Title 14, Section 15000 *et seq.*; the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*; and the NEPA regulations. Accordingly, the DEIR/S must be revised and re-circulated.[1]

I. Introduction

CEQA and NEPA contain parallel requirements mandating that an environmental review accompany proposals for major federal and state actions significantly affecting the environment. The EIR/EIS must include, among other things, an analysis of the reasonably foreseeable and significant direct, indirect, cumulative, short- and long-term adverse environmental consequences of each developed alternative. This disclosure must be undertaken to adequately inform decision-makers and the public about the potential impacts of a project, and to avoid or reduce environmental damage through the use of alternatives or mitigation measures.

When information on these consequences is incomplete or prohibitively expensive, the gaps must be noted, their relevance analyzed, and an evaluation of theoretical impacts based on credible scientific evidence given. The DEIR/S is to serve as "an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*County of Inyo. v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

As discussed below, the HST DEIR/S does not fulfill the basic requirements of CEQA and NEPA as it fails to provide enough information to adequately inform decision-makers and the public of the range of impacts resulting from the project. Simply put, the analysis in the DEIR/S is insufficient to fulfill the purposes for which it was drafted -- to adopt the HST Alternative and select preferred HST corridors/alignments and general station locations. (See DEIR/S at S-1.) The Authority and the FRA have not "demonstrate[ed] to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Berkeley Keep Jets Over Bay v. Port Commissioners* (2001) 91 Cal.App.4th 1344, 1374 (quoting *Schoen v. Dept. of Forestry* (1997) 58 Cal.App.4th 556, 573-574).) As such, the project should undergo further review and revision, consistent with these comments and proposed recommendations, before the HST Alternative is adopted.[2]

[1] The DEIR/S's failure adequately to meet these disclosure requirements makes it virtually impossible to make an informed comparison between the various proposed alternatives. For that reason, our comments will not attempt such a comparison. Rather, these comments will address the adequacy of the draft's discussion of the project's potential environmental impacts, and the specificity and enforceability of the mitigation and benefits proposed to offset these impacts. We have also added a section that specifically discusses the potential construction impacts under the HST Alternative. For a project of this size, the construction impacts are unquestionably enormous, and the Authority and FRA's failure to consider these impacts in detail is unacceptable.

[2] Notably, the draft repeatedly recognizes the need for supplemental analysis. For example, in the section of Biological Resources and Wetlands the DEIR/S states: "Given the data sets, the lack of identification of an impact does not necessarily mean that this portion of the proposed alternative would not result in potential impacts on

Comment Letter O015 Continued

II. Discussion of HST DEIR/S

A. *Chapter 3- Affected Environment, Environmental Consequences, and Mitigation Strategies*

1. Section 3.1- Traffic and Circulation

Impacts

Importantly, "intercity traffic in California is expected to grow from 155 million trips to more than 209 million trips in the next 20 years, with an estimated 58% of these trips made by automobile." (DEIR/S at 3.17-2; see DEIR/S at 3.1-5 ("Traffic conditions throughout northern and southern California are expected to worsen").) As stated in the DEIR/S, "the study area highway and roadway corridors considered in [the DEIR/S] represent some of the worst traffic conditions in the nation." (DEIR/S at 3.1-5.) While the HST may improve traffic conditions in some areas,[3] it will detrimentally impact the traffic conditions in other areas, particularly where HST station stops are located. (See DEIR/S at 3.17-2.)

For example, in discussing the Bay Area to Merced segment, the DEIR/S states: "The only significant projected degradation under the HST Alternative compared to the No Project Alternative would occur at the proposed Transbay Terminal, where the [Level of Service (LOS)] would degrade from LOS D to LOS F …" (DEIR/S at 3.1-15.) This would bring the LOS from *Fair* ("Delays may be substantial during portions of rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups")[4] to *Failure* ("Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.")[5] O015-1

Under the Los Angeles to San Diego via Orange County segment, "[t]raffic conditions are expected to worsen at the proposed HST station sites, with the exception of four stations, where funded roadway improvements will result in improved conditions under the No Project Alternative." (DEIR/S at 3.1-11.) Moreover, "[o]verall, … although highway conditions would improve under the Modal and HST Alternatives, the general conditions would remains at poor LOS [LOS E 'Represents the maximum vehicles that intersection approached can accommodate; may be long lines of waiting vehicles through several signal cycles']" or at Failure --LOS F.

biological resources, only that location-specific data would be required to make a more precise determination." (DEIR/S at 3.15-3.) This supplemental analysis should be prepared, circulated, and revised before the HST project is approved and goes forward, and additional mitigation measures should be reviewed and adopted before carrying out the project.

[3] The Modal Alternative will improve traffic conditions 21% above the No project Alternative, compared with 5% under the HST Alternative. (DEIR/S at 3.1-12 (Table 3.14-4.)

[4] DEIR/S at 3.1-2 (Table 3.1-1).

[5] DEIR/S at 3.1-2 (Table 3.1-1).

(DEIR/S at 3.1-13; see DEIR/S at 3.1-2 (Table 3.1-1).) These impacts are potentially significant and should be more critically and appropriately reviewed and mitigated.

Mitigation

Although the traffic impacts of the HST Alternative are significant and inconsistent with the public's understanding of the one of the fundamental purposes of the project -- that is, high-speed rail will aid in *decreasing* congestion and traffic -- the mitigation measures detailed in the HST are neither sufficiently specific nor clearly enforceable. For example, under the sections describing mitigation strategies, the draft states that the "California High Speed Rail Authority could participate in developing potential construction and operational mitigation measures in consultation with state, federal, regional, and local governments and affected transit agencies during project-level reviews." (DEIR/S at 3.1-23.) This discussion of mitigation strategies is insufficient. O015-1 cont.

In addition, the mitigation measures proposed do not address the foreseeable environmental impacts that the measures themselves may have. For example, under the DEIR/S a potential mitigation measure that may be developed would include "[m]ajor intersection improvements (full lane widening), which require significant right-of way acquisition to accommodate additional left-turn and/or through lanes." (DEIR/S at 3.1-23.) The effect of such acquisition should be further evaluated and analyzed.

2. Section 3.3- Air Quality

Impacts

"*Air pollution* is a general term that refers to one or more chemical substances that degrade the quality of the atmosphere." (DEIR/S at 3.3-1 (emphasis in original).) The DEIR/S does not adequately address the air quality impacts that would result from construction and operation of the HST, even though the DEIR/S suggests that these impacts are significant. For example, the project would result in "[s]hort-term construction impacts related to earthwork (cut and fill grading) that would result in dust (PM 10) and localized emissions"). (DEIR/S at 7-2.) PM 10 is just one of many pollutants identified by the U.S. Environmental Protection Agency as a concern nationwide. In fact, "PM10 continues to be a problem in the South Coast Air Basin, which is designated as nonattainment for both the state and national ambient air quality standards. More controls specific to PM10 will be needed to reach attainment." (DEIR/S at 3.3-14.) O015-2

Rather than discuss such construction impacts, the DEIR/S determines:

> Potential construction impacts and potential mitigation measures should also be addressed in subsequent analyses. Once an alternative and alignment is established a full construction analysis should be conducted. This analysis should quantify emissions from construction vehicles, excavation, worker trips, and other related construction activities. Mitigation measures, if required, should be

Comment Letter O015 Continued

> detailed and a construction monitoring program, if required should be established.

(DEIR/S at 3.3-33.) Leaving analysis of construction impacts for a future point in time is inconsistent with CEQA, because as the DEIR/S states the "construction period would last at least 10 years and the miles of corridor under construction at one time would extend across the state, these physical impacts would potentially be significant." (DEIR/S at 7-2.) These impacts are potentially significant and should be more appropriately and critically reviewed.

Similarly, the impacts from operating the HST stations have not been fully evaluated or discussed in the DEIR/S. While these impacts may be minimal, these impacts are known to result from the project and must be discussed. Further, there are a great number of traffic impacts around the HST stations, as suggested in the Traffic and Circulation section of the DEIR/S. The potential air quality impacts resulting from these traffic impacts are not fully assessed in the DEIR/S. Rather, the DEIR/S states:

> Once alignments are selected, if a decision is made to proceed with the proposed HST system, then local traffic counts could be conducted at access roads serving major station locations. These counts would provide more accurate information for determining potential local air quality hotspot locations.

O015-2 cont.

(DEIR/S at 3.3-33.) These impacts are potentially significant and should be more appropriately and critically reviewed.

One mode of HST technology considered in the DEIR/S "includes *existing diesel locomotive* intercity train equipment (e.g., Amtrak)." (DEIR/S at 2-27 (emphasis added).) The DEIR/S considers diesel technology "[b]ecause of the extensive constraints (e.g., existing historical land uses, sensitive coastal habitats, and established coastal communities) along portions of the existing LOSSAN corridor between Orange County (Irvine) and San Diego … The LOSSAN region is the only portion of the proposed HST system where non-electric train technology is being considered." (DEIR/S at 2-30.) The impacts of diesel-powered locomotives have not been evaluated in the Air Quality section of the DEIR/S and do not appear to exist in any other section of the DEIR/S. These impacts are potentially significant and should be more thoroughly reviewed and mitigated.

Mitigation

As in many other sections in the DEIR/S, these mitigation measures, too, lack specificity and enforceability. For example, the DEIR/S states: "At the project level potential mitigation strategies should be explored to address potential localized impacts … The proposed HST system could be designed to use state-of-the-art, energy-efficient equipment to minimize potential air pollution impacts associated with power used by the proposed HST system. Potential localized impacts could be addressed at the project level by *promoting* ... Increase use

of public transit … Increase use of alternative-fueled vehicles … Increase parking for carpools, bicycles, and other alternative transportation methods." (DEIR/S at 3.3-33 (emphasis added).) The DEIR/S further states: "Potential construction impacts, which should be analyzed once more detailed project plans are available, can be mitigated by following local and state guidelines." (DEIR/S at 3.3-33.) Merely requiring compliance with applicable laws and regulations, and promoting but not requiring more efficient measures, is insufficient mitigation for a project of this magnitude.

The following additional mitigation measures also merit consideration:

- Prohibiting engine idling of onroad and nonroad heavy-duty diesel construction equipment
- Ensuring appropriate maintenance and regular, periodic inspections, including smoke testing inspection of onroad and nonroad construction equipment
- Encouraging the use of better construction equipment (for example, alternative fuel (non-diesel) equipment such as electric or propane forklifts, solar signboards and fuel cell generators) through incentives
- Requiring that construction equipment use low sulfur diesel fuel with after-treatment technologies
- Requiring the use of diesel particulate filters on onroad and nonroad construction vehicles
- Requiring the use of oxidation catalysts on onroad and nonroad construction vehicles
- Constructing the HST stations and other facilities in compliance with Leadership in Energy and Environmental Design ("LEED") green building standards

O015-2 cont.

3. Section 3.5- Energy

Impacts

California is the tenth-largest worldwide consumer of energy, and at 46% of California's consumption the transportation sector represents the largest proportion of energy consumed in the state. (See DEIR/S at 3.5-7.) The energy consumption based on passenger miles traveled ("PMT") is 1,200 Btus/PMT for the HST compared with 3,300 Btus/PMT for airplanes. (DEIR/S at 3.5-16 (Table 3.5-5).) However, the direct energy consumption for HST is 924,384 Btus/VMT compared with 334,086 Btus/VMT for airplanes. (DEIR/S at 3.5-4 (Table 3.5-1).) The current presentation of data in the DEIR/S is confusing and should be revised to present the analysis in a manner that adequately alerts the public to the amount of energy the HST Alternative will consume.

O015-3

There are some potentially substantial and significant impacts that are identified but not analyzed in the DEIR/S. For example, the DEIR/S states: "Given the scope and scale of the … HST Alternative, it is anticipated that secondary construction-related energy impacts would be substantial" and "[c]onstruction of the … HST Alternatives would potentially represent a significant use of nonrenewable resources." (DEIR/S at 3.5-20.) As these impacts admittedly may be substantial and significant, these impacts should be reviewed in a supplement to the DEIR/S before the project goes forward.

Comment Letter O015 Continued

Mitigation
The DEIR/S commits to adopting specific mitigation measures, including to "[u]se regenerative braking to reduce energy consumption of the system," "minimize grade changes in steep terrain areas to reduce the use of electricity during peak periods," "[u]se energy-saving equipment and facilities to reduce electricity demand," "[m]aximize intermodal transit connections to reduce automobile VMT related to the HST system," "[d]evelop and implement a construction energy conservation plan," and "[d]evelop potential measures to reduce energy consumption during operation and maintenance activities." (DEIR/S at 3.5-22, 23.) However, "[d]etails regarding energy conservation practices have not been specified for the HST Alternative, which has not been designed in detail, nor have construction methods and staging been planned at this time." (DEIR/S at 3.5-19; see DEIR/S at 3.5-22, 23.) For the adopted mitigation measures to have sufficient specificity and enforceability, these details and methods must be developed and discussed in a supplemental DEIR/S.

O015-3 cont.

4. Section 3.7- Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

Impacts
The DEIR/S addresses the impacts on land uses. "The potential compatibility of the alternatives with existing land use is evaluated based on the potential sensitivity of various land uses to the changes which would be included with the Modal and HST Alternatives, and the potential impact of these changes on existing and planned land uses." (DEIR/S at 3.7-2.) Under this means of evaluation, alignment choices within the existing right of way are always considered low impacts. (See DEIR/S at 3.7-4 (Table 3.7-2).) This appears to underestimate the actual impacts of the project. HST alignments that travel within existing rights of way may still pose new, or magnify existing, negative impacts on surrounding communities and resources. These potentially significant impacts are inadequately addressed in the DEIR/S and need to be further assessed in a supplemental DEIR/S before the project goes forward.

O015-4

The study area for land use compatibility is .25 miles on either side from the centerline of the rail, stations, and other potential HST related facilities. (DEIR/S at 3.7-5.) For property impacts, the study area is 100 feet on either side of the centerline. (DEIR/S at 3.7-5.) Realistically speaking, a property that is 150 feet or 200 feet from a train speeding by at 200 miles per hour ("mph") eight times a day will be significantly impacted by those occurrences. Both of these study areas need to be expanded to adequately assess potential impacts

The DEIR/S also addresses the impacts on environmental justice communities. The study area for environmental justice communities is .25 miles on either side from the centerline of the rail, stations, and other potential HST related facilities. (DEIR/S at 3.7-5.) This study area also needs to be expanded to adequately assess the impacts from the HST. A more appropriate area for assessing such impacts would be the same area used to identify a community as an

environmental justice community. Expanding the study area in this manner would provide a more accurate review of the communities impacted by the project.

Even within this limited study area, the discussion of environmental justice impacts in the DEIR/S does not comply with existing laws and regulations. For example:

> Planning and programming activities that shall have the potential to have a disproportionately high and adverse effect on human health or the environment shall include explicit consideration of the effects on minority populations and low-income populations. Procedures shall be established or expanded, as necessary, to provide *meaningful opportunities for public involvement by members of minority populations and low-income populations* during the planning and development of programs, policies and activities.

O015-4 cont

(U.S. Department of Transportation, *Environmental Justice in Minority Populations and Low-Income Populations*, Order DOT 5610.2 (emphasis added).) In spite of this specific guidance, there is little analysis of environmental justice concerns, or specific discussion of efforts to "provide meaningful opportunities for public involvement by members of minority populations and low-income populations." This is troubling considering many of the proposed HST station stops are located "within a minority population." A supplement to the DEIR/S should engage communities around potential HST alignment and station stops to more fully assess and address environmental justice concerns.

Mitigation
The DEIR/S fails to discuss any measures to mitigate the impacts HST will have on land use or environmental justice communities. Instead the draft saves for the project level analyses discussion of consistency with existing and planned land use, neighborhood access needs, mutli-modal connectivity opportunities, and outreach to potential environmental justice communities. (DEIR/S at 3.7-26, 27.) For the Authority and the FRA to present an adequate and accurate analysis of the impacts that the HST will impose, and measures that will mitigate that impact, these issues need to be explored in a supplement to the DEIR/S.[6]

5. Section 3.8 Agricultural Lands

Impacts
California leads the nation in agricultural production and export. (DEIR/S at 3.8-5.) In 2001, California farmland comprised 4% of the nation's total, and its agricultural production accounted

O015-5

[6] The Authority and FRA should consider providing free or nominal cost hard (or compact disc) copies of the HST DEIR/S to low-income communities and communities of color that may be directly or indirectly impacted by the HST, as well as conducting workshops and hearings in all areas where there is a proposed HST station stop, with additional outreach in environmental justice communities.

Comment Letter O015 Continued

for 13% of the nation's gross cash receipts. (DEIR/S at 3.8-5.) As important as California's farmland is to our nation's economy, the "Agricultural Lands" considered in the DEIR/S are only those included in the Farmland Mapping and Monitoring Program ("FMMP"). Indeed, the analyses for the Sacramento to Bakersfield and Bakersfield to Los Angeles segments indicate that aerial views clearly show farmland not included in the FMMP. (DEIR/S at 3.8-6, 7.) Likewise, grazing lands are also left out of the FMMP and the impacts analysis. (DEIR/S at 3.8-6.) As such, there is clearly more farmland than that included in the FMMP. The DEIR/S makes no attempt to include the potentially significant impacts on these lands or estimate what proportion of California's farmland is actually covered by the FMMP database.

The HST alternative will result in major impacts to farmland. According to the DEIR/S, the HST Alternative is expected to impact between 2,445 and 3,860 acres of farmland. (See DEIR/S at 3.8-10 (Table 3.8-1).) The project's projected impacts are limited to a tally of the amount of farmland converted by the footprint of each alternative -- "the geographic area needed for the improvements only, with no extra area surrounding them."[7] (DEIR/S at 3.8-3.) Focusing largely on the 0 to 100 feet that will be required for the rail, the draft fails to address substantial impacts. (See DEIR/S at 3.8-3, 4.)

O015-5 cont.

The DEIR/S suggests that the primary contributor to farmland loss will not be the 50 or 100-foot strip upon which the route is actually built, but rather urban development -- a function of population growth, housing economics, and commuting patterns. (See DEIR/S at 3.8-9 (under the no project alternative 845,000 acres of farmland will be lost by 2020 and transportation improvements, i.e. footprints of new roads or runways, account for less than one percent of the projected farmland loss).) This DEIR/S fails to consider the possible impacts of the HST alternatives other than the admittedly minor "footprint" of the rail.[8]

Mitigation

Mitigation strategies for the HST Alternative include avoidance through alignment choice, and reduction of impacts by sharing existing rights-of-way where possible. (DEIR/S at 3.8-18.) Site-specific impacts and specific farmland mitigation strategies will await a project level analysis. (DEIR/S at 3.8-18.) These impacts and strategies should be considered before the project is approved. These mitigation strategies should discuss, among other things, possible placement of stations that encourage smart growth.

[7] This quote is taken from the Modal Alternative discussion, but the HST Alternative discussion suggests the same methodology.

[8] Key questions to explore must include the following: (1) What impacts will urban growth and commuting patterns have on impacts to farms under each alternative? (2) Which HST station locations have greater potential to spur urban growth patterns that are detrimental to farmlands? (3) Which station locations will have the least potential negative impacts?

6. Section 3.10- Public Utilities

Impacts

The DEIR/S identifies and compares the potential impacts each alternative would have on utility systems. The potential for impacts is calculated by tallying the number of identified utilities that "conflict," i.e. are within 100 feet of the centerline of a proposed alignment and 100 feet around each station. (DEIR/S at 3.10-2.) Potential for impacts from all utilities are represented by: major transmission electrical lines and substations of 230 Kilovolts or more; natural gas facilities and high pressure pipelines; and wastewater treatment facilities in the project corridor and pipelines of 36 inches or more in diameter. (DEIR/S at 3.10-2.) System-wide, the HST Alternative will impact 511 to 842 identified public utilities depending upon alignment choices. (DEIR/S at 3.10-7 (Table 3.10-2).) Yet, the DEIR/S identifies no significant potential impacts that could not be avoided, minimized, or mitigated. (DEIR/S at 3.10-3.) This needs to be further explored as these impacts are potentially significant and should be more appropriately and critically reviewed.

The DEIR/S's methodology of tallying the number of utilities that intersect with the alternatives fails to identify potential environmental impacts, and ranking the segments by the amount of intersections provides very little information. For example, the DEIR/S does not discuss the impacts that may result from damage to the sewage and natural gas pipelines that the project intersects. Without such analysis, no meaningful comparison of alternatives is possible. Costs and disruptions from impacts to wastewater, electricity, and natural gas would all have differing impacts, but no analysis of the differentiated impacts is given. The impacts are potentially significant and should be evaluated in a supplement to the DEIR/S.

O015-6

The DEIR/S's focus on electric, natural gas, and wastewater as representative of all utilities excludes other potentially significant utilities. For example, for the segment from Los Angeles to San Diego via the Inland Empire, the DEIR/S shows a cluster of oil pipelines running alongside and crossing the HST route, yet oil pipelines are not considered in the analysis. (See DEIR/S at Figure 3.10-1.) According to the DEIR/S, the subsequent project-level analysis will focus on local details once alignments are better defined. Specifically, more information will be collected on water supply lines; wastewater conveyance lines; wastewater and water pump stations; storm drains; fiber-optic lines; telecommunication lines; and other utilities and pipelines such as liquefied petroleum and crude oil. (DEIR/S at 3.10-11, 12.) However, by failing to address the impacts from other utilities in the context of this draft, the Authority and the FRA have hindered informed decision-making and meaningful public comment.

Comment Letter O015 Continued

Mitigation
The mitigation strategies in the DEIR/S focus on avoiding conflicts and, if such avoidance is infeasible, on reducing and minimizing the potential impacts. (DEIR/S at 3.10-11.) Such reduction and minimization may include relocation, reconstruction, or restoration of the utility. (DEIR/S at 3.10-11.) According to the DEIR/S, these mitigation strategies would be further refined in subsequent project level reviews. It is critical to inform the public of specific and enforceable mitigation under the HST Alternative before the project is approved.

O015-6 cont.

7. Section 3.11- Hazardous Materials and Wastes

Impacts
The methodology in the DEIR/S focuses on comparing a map of Federal National Priorities List/Superfund sites, California's State Priority List sites, and California Solid Waste Landfill sites, with a map of potential project alignments. (DEIR/S at 3.11-2.) The sites are undifferentiated by type or severity. (DEIR/S at 3.11-2.) The analysis essentially consists of a tally of the number of potential intersections between the alignments and hazardous sites, without site-specific information or even determinations of how many intersections are Superfund sites and how many are landfills. This methodology makes it almost impossible to make an informed decision about impacts. By limiting the analysis to the potential for intersections the DEIR/S fails to reveal the range of significant potential impacts, as required by CEQA and NEPA.

The DEIR/S identifies two factors that influence the severity of impacts: (1) nature and severity of contamination, and (2) construction and operation activities that are likely to occur near the sites, but fails to give information about either factor. (DEIR/S at 3.11-3.) The sites that pose the greatest concern are those with soil or groundwater contamination within the right-of-way or near excavation sites. (DEIR/S at 3.11-3.) The DEIR/S does not provide information about the nature and severity of contamination at sites, so the "site-count" may not fully divulge potential risk-levels. (See DEIR/S at 3.11-5 (Table 3.11.3-1).) Critically, the DEIR/S states that most sites identified are "relatively minor," but there is no explanation of what "minor" means, or relative to what. (See DEIR/S at 3.11-3.) Further, the DEIR/S fails to identify smaller, possibly much more numerous, hazardous materials sites such as leaking underground storage tanks, and instead defers this until after alignment choices are made. (See DEIR at 3.11-2.) There is no attempt to estimate the number or proportion of hazardous sites left out of the analysis, or the potential impacts of those sites.

O015-7

Mitigation
Once again, according to the DEIR/S, mitigation measures will depend on site-specific information. Specific environmental documentation and site assessment will not be required or conducted until the project-level analyses. As no impacts are identified, the mitigation strategies lack specificity and enforceability and are merely referenced as avoidance and remediation. Critically, failure to include this information in the DEIR/S may drastically underestimate the cost of the project. As the DEIR/S indicates, remediation of hazardous waste sites can

dramatically increase the overall cost of a project. (DEIR/S at 3.11-1.) Because the severity, type, and impacts of contaminated sites are not identified, no information is given on what the potential cost increase might be for any alternative or alignment. It is critical to inform the public of specific and enforceable mitigation for the HST Alternative before the project is approved. These measures need to be further explored in a supplement to the DEIR/S.[9]

O015-7 cont.

8. Section 3.14- Hydrology and Water Resources

Impacts
The DEIR/S attempts to address "three types of hydrology and water resources —floodplains, surface water, and groundwater—that have the potential to be affected by the proposed alternatives." (DEIR/S at 3.14-1.) In this effort, the DEIR/S states that potential impacts "on hydrology and water resources which may result from the alternatives or the proposed HST system alignment and station options include potential encroachment on or location in a floodplain, potential impacts on water quality, potential increased/decreased runoff and stormwater discharge due to changes in the amount of paved surfaces, potentially increased or decreased contribution of nonpoint-source contamination from automobiles, and potential impacts on groundwater from dewatering or reduction of groundwater recharge." (DEIR/S at 3.14-8, 9.) But the document fails to analyze any of those potential impacts at a meaningful level of detail.

For example, the DEIR/S fails to adequately consider the project's effects on groundwater. In discussing the Bakersfield to Los Angeles alignment option the DEIR/S states: "Absent field verification and more detailed data collection, it is not possible at this program level of analysis to determine specifically which HST Alternative alignment option, with its respective tunneling in the Tehachapi Mountains, would potentially affect more groundwater resources." (DEIR/S at 3.14-15.) Further lacking from the DEIR/S's discussion is the significance criteria used in the DEIR/S to determine what impacts to water bodies are indeed significant, either in terms of water quality or quantity.

O015-8

The DEIR/S states that "[s]ubsequent analysis to further identify potential impacts on water quality and hydrologic resources would be required as project development, environmental review, and facility design are pursued, if a decision is made to go forward with the proposed HST system." (DEIR/S at 3.14-19.) This analysis is critical to understanding the full array of impacts that a project of this magnitude will impose. Such an analysis should also address the impact pollutants of concern stemming directly or indirectly from the project (such as, pathogens/coliform, metals, nutrients, pesticides, organic compounds, sediments, trash and debris, oxygen-demanding substances, and oil and grease) may have on water resources.

[9] Key unanswered questions include: (1) What are the potential impacts to human health? (2) What are the potential impacts to ecosystems? (3) Are there any estimates for what mitigation might cost for each alternative, alignment, site, and material? (4) What is the estimated number of, and potential impact of hazardous material from, sites not included in the analysis? (5) What are the estimated methods and costs for mitigating impacts from sites not included in the analysis?